



LAC-IEE-03-53

AMENDED ENVIRONMENTAL THRESHOLD DECISION

Activity Location : G-CAP Regional Program (Central America and Mexico)

Activity Title : Central America and Dominican Republic Quality Coffee Program

Activity Number : 596-009

Funding : \$8 M for Regional Quality Coffee Program;
\$7,458,000 for Improved Competitiveness of Other Rural
Non-Traditional Exports;
\$1,500,000 for monitoring and electronic alliance

Life of Activity : 2002 - 2005

IEE Prepared by : Michael Donald
Regional Environmental Advisor/G-CAP ✓

Recommended Threshold Decision : Categorical Exclusion, ✓
Negative Determination with Conditions, ✓ Deferral ✓

Bureau Threshold Decision : Concur with Recommendation

Comments:

This amended Environmental Threshold Decision (ETD) reverses a Positive Determination issued in an earlier ETD (LAC-IEE-02-50, signed 28 August 2002). All other decisions in LAC-IEE-02-50 remain unchanged.

LAC-IEE-02-50 had issued a Positive Determination for the activities of sub Intermediate Result (IR) 1 ("Enhanced Quality"): improving quality at the farm level and improving quality at the coffee mill level. Activities to improve quality at the farm level involve various capacity building approaches to help farmers better understand and penetrate the market for high quality and specialty coffee, including verification and certification of sustainability practices; to strengthen coffee producer groups in the application of grades and standards; to identify

geographic areas for coffee production; and to promote buyer-seller arrangements for quality and specialty coffee. This amended ETD issues a **Categorical Exclusion** for improving quality at the farm level, according to 22 CFR 216.2(c)(i) for activities involving education, technical assistance and training that does not have an effect the natural or physical environment.

Activities to improve quality at the coffee mill level involve the following:

- Constructing or modifying environmentally appropriate wet mills and coffee drying patios for demonstration in selected communities. ✓
- Educating farmers by establishing small coffee cupping labs (used to evaluate the flavor profile of a coffee). ✓
- Technical assistance and training for managing, operating and maintaining wet mills. ✓
- Promoting alliances between producers, wet mills and roasters. ✓

This amended ETD issues a **Negative Determination with Conditions** for these activities with the conditions that:

- 1) milling byproducts from the wet mills (e.g., coffee pulp and water) are not permitted to enter any water bodies, waterways or where aquatic contamination can occur, and beneficial uses of the waste, such as fertilizer, will be encouraged; and ✓
- 2) attempts should be made to recycle the water used in the milling process. ✓

A deferral is in effect for IR2 until activities are defined (see IEE). ✓

J. Paul des Rosiers Date 8-5-03
J. Paul des Rosiers
Acting Bureau Environmental Officer
Bureau for Latin America & the Caribbean

Copy to : Glenn Alders, Director, USAID/G-CAP

Copy to : Kurt Rockeman, MEO, USAID/G-CAP

Copy to : Anne Dix, MEO, USAID/Guatemala

Copy to : Michael Donald, REA

Copy to : Michael Kerst, LAC/CAM

Copy to : IEE File

ENVIRONMENTAL THRESHOLD DECISION

Activity Location	: G-CAP Regional Program - Central America and Mexico
Activity Title	: Central America and Dominican Republic Quality Coffee Program
Activity Number	: 596-009
Funding	: \$8M for the Regional Quality Coffee Program; \$7,458,000 for the Improved Competitiveness of Other Rural Nontraditional Exports; \$1.5M for monitoring and electronic alliance
Life of Project	: 2002 – 2005
IEE Prepared by	: Michael Donald Regional Environment Advisor/G-CAP
Threshold Decision	: Categorical Exclusion, Deferral, Positive Determination, Negative Determination with Conditions
Bureau Threshold Decision	: Concur with Recommendation

Comments: This coffee program is part of Strategic Objective 596-009, Increased Diversification of the Rural Economy. This Strategic Objective has two intermediate results (IRs): IR1-Improved Competitiveness and Sustainability of Quality Coffee Exports; and IR2-Improved Competitiveness of Other Rural Nontraditional Exports.

A **Deferral** is issued for IR2 until the types of activities are defined, at which time an amended IEE will be drafted before obligation of any diversification funds, anticipated for the spring of 2003. The reason: concerns about these activities focus on how coffee farms are used subsequent to their forthcoming abandonment. Intentional or de facto land use conversion due to logging or a transition to annual crops may cause deforestation, thereby reducing biodiversity and increasing soil erosion. Hence, further detail regarding the program's diversification aspect to consider potential mitigation measures is needed before that component can proceed.

The remaining text of this document refers to IR1 only: IR1 has three sub-intermediate results: 1 – Enhanced quality; 2 – Improved business practices and marketing; and 3 – Market-based policies favorable to specialty and premium coffee supported by reliable data.

A **Categorical Exclusion** is issued for education, technical assistance and training programs, and studies, for the following sub-IRs of Intermediate Result 1: 2.2; 2.3, 2.4, 2.5, 3.1 and 3.3 per 22 CFR 216.2 (c)(2)(i) and (iii).

A **Positive Determination** is issued for the two activities of sub-IR1, Enhanced Quality: 1.1 (improving quality at the farm level); and 1.2 (improving quality at the coffee mill level), for which an Environmental Assessment (EA) is required. The Scope of Work for the EA and the EA itself must be approved by LAC BEO prior to implementation. It should include, *inter alia*, a description of how clean production techniques will be applied and a mitigation and monitoring plan. These activities should be aligned with minimized environmental impact, as is done with many organic certifications. Further, “improving quality at the coffee mill level” activities shall - with respect to wet coffee milling - incorporate appropriate measures to prevent milling byproducts (e.g. pulp and water) from entering the waterways (e.g. absorption ponds or similar structures), whether for either old or new facilities. Water used in the milling process should be recycled if possible. Coffee pulp produced shall not be deposited in or near any water bodies or where aquatic contamination can occur, rather, its use as fertilizer shall be encouraged.

Under IR1, a **Negative Determination with Conditions** is issued for sub-IRs: 2.1 and 3.2, which involve infrastructure improvements, wet milling, coffee pulp disposal, use of chemicals, maintenance of shade and policy development. The following is required: minimize the use of chemicals, maintain shade treed in diversity and number, and undertake soil conservation measures.

Activities of sub-IR2, Improved Business Practices and Marketing, will incorporate: minimizing the use of chemicals, maintenance shade trees in diversity and number, soil conservation, recycling of coffee pulp and water in the milling process.

Funds shall not be used for pesticide use and/or procurement, or to purchase equipment that could be used for timber harvesting, unless a supplemental IEE is submitted to the BEO for approval.

Any construction (e.g., coffee staging areas or facilities to fortify commercialization), or improvement of transportation systems (e.g., road improvements) shall require a separate environmental review with mitigations approved by the BEO. For any such construction, the contractor shall develop a mitigation and monitoring plan to address potential environmental impacts of the project. Mitigations shall include all phases of construction, operation and maintenance with an effective process for monitoring the implementation and effectiveness of the mitigations. All grants, cooperative agreements or contracts issued under this activity shall contain statements to the effect that no construction activities will commence until the LAC BEO has approved guidelines and procedures for managing their potential environmental impacts; and that the contractor shall ensure full compliance for prescribed mitigations.

The USAID/G-CAP program officer shall submit a report to the LAC BEO by September 30, 2003 that addresses these conditions and any other mitigations taken to minimize potential environmental impacts.

Date

Gilbert S. Jackson
Acting Bureau Environment Officer
Bureau for Latin America and the Caribbean

Copy to : George Carner, Director, G-CAP

Copy to : Michael Nehrbass, USAID/G-CAP/PDM

Copy to : Michael Donald, REA-Central America/Mexico

Copy to : Anne Dix, MEO

Copy to : IEE File

Initial Environmental Examination

Activity Location: Central America and the Dominican Republic

Activity Title: Increased Diversification of the Rural Economy SO (596-009)

Activity Number: SO 596-009, IR1: Improved Competitiveness and Sustainability of Quality Coffee Exports

Funding: \$8,000,000 for the Regional Quality Coffee Program
\$7,458,000 for the Improved Competitiveness of Other Rural

Rural Nontraditional Exports (NTEs), and
\$1,500,000 for monitoring and electronic alliance

Life of Project: 2002-2005

IEE Prepared by: Michael Donald, Regional Environmental Advisor/G-CAP

I. Summary of Recommended Threshold Decision

Pursuant to 22 CFR 216.3(a)(iii) of AID environmental procedures, environmental analysis/evaluation is required for new projects, programs or activities authorized by AID. The attached information presents an analysis of the activities planned under the Increased Diversification of the Rural Economy Strategic Objective, proposed actions and the environmental impacts of those actions.

This SO is composed of two IRs: IR1: Improved Competitiveness and Sustainability of Quality Coffee Exports and IR2: Improved Competitiveness of Other Rural Nontraditional Exports.

A **categorical exclusion** is recommended, in accordance with 22 CFR 216.2 (c)(2)(i & iii) for education, technical assistance and training programs and studies for sub-IRs 2.2, 2.3, 2.4, 2.5, 3.1, and 3.3 under the Quality Coffee Program.

Pursuant to 22 CFR 216.3(a)(iii) & (3), a **Negative Determination with Conditions** is recommended for the following sub-IRs: 1.1, 1.2, 2.1 and 3.2 involving infrastructure improvements, wet milling, coffee pulp disposal, use of chemicals, maintenance of shade and policy development.

A **Deferral** is issued for IR2: Improved Competitiveness of Other Rural Nontraditional Exports activities until the types of activities are defined, at which time an amended IEE will be drafted before obligation of any diversification funds, anticipated for the spring of 2003.

II. Background

The Problem

During 2000 and 2001, coffee prices dropped to their lowest levels in 30 years due to worldwide oversupply. Coffee bean prices at the farm level have, in Central America and the Dominican Republic, have plummeted below the cost of production for most coffee producers. This is causing serious hardships to coffee farmers in the region.

Over the past five years, the world coffee market has undergone important structural changes in demand and supply side, which reflects a steady increase in world production and export levels. The current crisis in prices is a consequence of the structural market changes. The two principal factors that underlie the current crisis are structural changes in demand and oversupply of coffee, driven by increased production in Brazil and Vietnam.

The crisis is most apparent in Central America and the Dominican Republic, where the coffee-price collapse has coincided with drought and the global economic downturn. Central American countries have witnessed a drop in revenue from coffee exports of US \$1 billion over the past two years. Exports for the 1999/2000-crop year were about US\$1.7 billion, last year's (2000/01) dropped to \$950 million, and this year (2001/02) they are estimated to be \$700 million. The low prices for the majority of coffee are not expected to change over the next several years, and in combination with limited capacity to significantly lower the costs of production, coffee growers need to either shift to higher paying high-value coffee or diversify. There is a massive unemployment situation in the region, and 400,000 coffee pickers (temporary workers) and more than 200,000 permanent workers face layoffs at the end of the 2002 coffee season. The coffee crisis critically affects rural poverty, since unlike other commodity plantation crops such as sugar or oil palm, the bulk of coffee producers are small holders living in remote rural areas. Increased economic dislocation and unemployment is likely to lead to increased illegal immigration to the U.S. and higher levels of crime through the region.

The Rural Diversification Program Strategy

To respond to this problem, USAID has designed a strategy designed to assist Central American countries and the Dominican Republic to compete in the high quality segments of the coffee market. The region's competitive advantage lies in having the agro-ecological conditions (altitude, agro-climatic, and soil) that give Central America and the Dominican Republic potential for improvements in quality or being converted to specialty coffee. This includes the presence of bourbon variety coffee and the "washed coffee" industrial process. The countries in the region have a tradition of producing coffee, production structures in place, and an abundance of labor.

To assist the competitive transformation of the coffee sector in Central America and the Dominican Republic (CA and DR), USAID/Guatemala-Central American Program will help these countries pursue the following strategy:

- Enhancing coffee quality, productivity and environmental management in the coffee-producing areas with comparative advantages.
- Improving business practices and linkages.
- Promoting value added transformation.
- Enabling market-based policies.
- Promoting diversification from coffee into other agricultural and non-agricultural alternatives, when significant potential for producing quality coffee is lacking.

An Opportunity/An Imperative

The emergence of high quality and sustainable coffees, are referred in this document as quality coffees. One of the characteristics of quality coffee is that it means different things to different people. The term covers basically all coffees that are not traditional industrial blends, either because of their high quality and/or limited availability on the producing side, or because of flavoring and/or packaging and certification schemes. Specialty coffee consumption is growing rapidly in 'traditional' consuming countries, whereas regular coffee consumption is stagnating. It is estimated that the number of Americans drinking specialty coffees on a daily basis will grow from 20 to 27 million in 2002, up from only seven million in 1997. Looking ahead industry analysts estimate that specialty coffee sales will grow by 20 to 25 percent per year, if a consistent and stable supply is available, because the specialty coffee is still in the early rapid-growth stage of its product life cycle.

Quality and value will continue to emerge as key standards for competitiveness, against the backdrop of continued but more modest prosperity in the European Union and the United States. In these markets, post-war baby boomers will drive growing demand for "highly targeted and specialized products."¹ Mass-market brands are particularly vulnerable to intense competition. Quality coffees will likely continue their strong growth trend, while growth of standard brands will remain stagnant. These standard, commercial brands will likely retain the lion's share of the market, based on their affordable price and their vigorous promotion. However, out-of-home consumption, food service, and private-label programs offer alternative and increasingly larger channels of distribution that have much lower barriers to entry. Over the next ten years, these segments are expected to capture nearly two-thirds of new consumer food spending in the United States.²

A strategy of improving quality is key for the participating countries for several reasons. First and foremost, roasters are willing to pay more for quality coffees, and especially for a consistent supply. Improvements in quality can also drive increases in local consumption, as domestic consumers become more knowledgeable. Moreover, the region's comparative advantage lies in producing quality coffees.

Geographic Focus

Central America and the Dominican Republic are known for their general quality of coffee and

the crisis has hit these countries particularly hard because of the relatively high importance of the sector to their economies. Other countries in the region are also known for their high quality coffee, namely Mexico and Panama. USAID has decided that it must concentrate its relatively limited resources based on the magnitude of the crisis, the relative importance of the quality coffee sub-sector to a country and where these resources can have the greatest impact. The Central America and the Dominican Republic Quality Coffee Program will therefore focus on the higher quality and premium coffee producing regions in the Dominican Republic and the six countries of Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama) that are the main producers and exporters of these types of coffees.

Customer Focus

The program will focus on the small to medium scale farmers as the first-line beneficiaries, and the activities selected will be market driven. Small and medium scale farmers are likely to be at a disadvantage regarding access to technology, information, and credit. The program will take advantage of the natural endowments that Central America and Dominican Republic small scale coffee farmers have in producing quality and premium coffees. Such endowments are the altitude, microclimates, cultivars, and low pesticide uses that they have. The program will focus on promoting quality coffees that sell at higher premiums.

III. Summary Program Description

The expected result is increased competitiveness and the indicator at the Strategic Objective level is the Value of Central America and the Dominican Republic Quality Coffee Exports / Value of Global Quality Coffee Exports. This indicator will measure the change in market share of quality coffee. Data for the exportable production of high quality coffee in Central America and the Dominican Republic can be obtained from the national coffee associations in each country.

Given that the comparative advantage of Central America and the Dominican Republic is in producing high quality coffee, the overall strategy for USAID's work in this sector will be to promote rural prosperity by increasing the competitiveness of small and medium scale producers of higher value coffee and by promoting the diversification of the rural economy. Enhanced quality, productivity, improved business linkages, functioning market policies, and sound environmental management are essential elements of the project for improving the competitiveness of coffee producers for export and internal consumption of quality coffee.

IR: Increased competitiveness and sustainability of higher quality coffee exports

SO Indicator: Value of Central America and the Dominican Republic Quality Coffee Exports / Value of Global Quality Coffee Exports

Sub-Intermediate Result 1

Enhanced quality

Improving quality at the farm level

Improving quality at the coffee mill level

Sub-Intermediate Result 2

Improved business

Improved market differentiation and certification

Increased value added

Improved business practices

Introduction of improved promotional strategies

Improved market

Sub-Intermediate Result 3

Market-based policies favorable to specialty and premium coffee

More open policies that enhance competitiveness of quality coffee

Market-oriented policy analyses, formulation, and data compilation

Trade policies enhanced

Analysis of anticipated results and links to specific activities

Sub-Intermediate Result 1: Enhanced Quality

A strategy of improving quality is key for Central America and the Dominican Republic since the region's comparative advantage lies in producing quality coffees. Increasing quality can help national coffee sellers, and in particular small- and medium-scale farmers, develop and strengthen their long-term relationships with exporters, importers, and retailers, and increase their ability to negotiate prices, including quality premiums. Improving quality can help national coffee sellers develop direct links and access to international markets. Improving quality can also help countries, such as Honduras and the Dominican Republic, generate more export revenue since they receive an automatic discount because of low quality considerations on almost all the coffee that they export.

In general terms, fields that are 1,200 meters above sea level have a higher potential to produce high quality coffee (gourmet and specialty coffee), while those located below 800 meters lack the potential. "Extra hard," "Prime" and "Extra Prime" beans, produced between 800 and 1,200 meters can achieve a high quality and premium prices. However, they need to be processed without defects to effectively differentiate from similar coffees produced in Mexico and Brazil. Coffee defects are imperfections that affect the natural characteristics of the bean. They are detected visually and/or through cupping and may be the result of plantation conditions; "harvesting practices;" prolonged storage or transportation delays, or processing.

For each country the program will follow a specific consistent enhanced quality strategy to identify the potential high quality coffees produced, their attributes, and market preference and the key factors that affect quality and its consistency throughout the entire production chain. Finally, the strategy will identify alternatives for overcoming these problems as well as the public policies, investment instruments (both public and private) that will facilitate the adoption of alternatives.

A strategy of improving quality entails managing the entire coffee production process in an integral way, from the coffee planting and harvesting to the storage and shipping of green coffee. Starting with the minimum necessary production conditions, that are ideal agroecological conditions, particularly altitude, producers must manage a variety of elements to avoid defects and maintain quality during the production and milling processes.

1.1 Improving quality at the farm level

Improving quality begins on the farm. Farmers need to grow high quality coffee and get it to the wet mill in optimum conditions. Mechanisms should be put in place at the coffee collection centers to measure quality and compensate the producer for the delivery of quality coffee. It is not unusual to find good quality cherries damaged by fermentation because of transportation delays. Therefore, improvements in transportation infrastructure are vital and the IDB has indicated a willingness to focus on this key element in the production chain. Supporting producers (especially the small ones) in developing organizational and cooperative approaches

will help overcome many managerial problems and improve quality. For example, cooperatives can help producers work with quality standards and guidelines in harvesting, and empower producers in price negotiations.

Illustrative activities include:

- Identify the quality requirements of high quality coffee buyers and roasters and disseminating these to producers.
- Improving application of grades and standards through institutional strengthening of coffee producer groups.
- Identifying specific geographic areas with potential for quality coffee production and key actions to improve quality and achieve greater market penetration.
- Promoting longer-term buyer-seller arrangements for quality and specialty coffee.
- Assisting producers and countries to incorporate sustainability concepts into their marketing strategies, so they could address verification and certification capabilities.

Recommendations for Environmental Action:

That a negative determination be issued, pursuant to 22 CFR 216.3(a)(iii) & (3), with stipulation that any infrastructure improvements (e.g. road improvement) will require an environmental assessment.

1.2 Improving quality at the coffee mill level

Mills can become pivotal elements for introducing the total quality concept throughout the entire production chain, from the preparation of the fields to the establishment of long-term sale relations to reach the international markets.

- *Minimizing defects in the milling.* The inadequate processing of coffee in the wet and dry mills can affect the quality of previous stages. The strategic placement of new mill capacity in quality coffee production areas will be an important part of this project. Most investments will have to be leveraged from private sector alliance partners or the IDB/WB. However, project funds will be set aside to invest in the construction or adjustments or modification of existing wet mills that can serve as demonstration sites and training centers. In addition, at the request of the Missions technical assistance may be provided at stages of the production chain. These could include the wet milling process, roasting, packaging and exporting.
- *Cupping.* Adequate tools must be used to measure and evaluate the “cup-value” of coffee samples. This requires establishing adequate cupping laboratories in the mills. The project will provide support for the training and certification of expert cuppers, including setting up groups of master cuppers, who can train other cuppers.
- *Business development.* The transformation of the mill from a coffee-processing center to a business enterprise will result in many positive effects. The project will promote the formation of alliances between producers and millers groups (possibly through cooperatives), to introduce improvements in production processes and directly access new markets.
- *Strengthening marketing.* The project will help mills that improve the quality of their coffee to develop a better negotiation capacity with exporters. For example, they can enter into contracts that specifically recognize and reward quality or add flexibility to receive higher

compensations for quality improvements. Improvements in quality and consistency will help increase the confidence of exporters and buyers in general to negotiate long-term contacts with millers.

Illustrative activities include:

- Construction, adjustment or modification of environmentally appropriate demonstration wet mills and coffee drying patios in selected participating countries.
- Establishment of small coffee cupping labs in strategic coffee producing areas to enable coffee farmers and wet mills to better understand coffee quality standards.
- Short-term technical assistance and training for the management, utilization and maintenance of wet mills. Local staff will be trained in cupping techniques for coffee grading.
- Alliances between producers, wet mills, and roasters for improved and consistent quality.

Recommendations for Environmental Action:

That a negative determination with conditions be issued in accordance with 22 CFR 216.3 (a)(iii) & (3) for wet coffee milling. Facilities, be they old or new, will have appropriate measures integrated into projects to prevent milling byproducts (e.g. pulp and water) from entering waterways (e.g. absorption ponds or similar structures). An attempt shall be made to recycle the water used in the milling process. Coffee pulp produced shall not be deposited in or near any water bodies or where aquatic contamination can occur, but rather a beneficial use such as fertilizer should be encouraged.

Sub-Intermediate Result 2: Improved Business Practices and Marketing

In addition to improving quality coffee, coffee producers can increase their sales of quality coffee by modernizing their business practices and marketing. The producers can take advantage of higher prices available in the quality coffee market by improving market differentiation, increasing value added, improving promotional strategies, and improving market intelligence and linkages with buyers and roasters. By enhancing the reputation and raising awareness about the quality of coffees grown in Central America and the Dominican Republic, producers and associations in the region will be better able to enter and participate in the growing high revenue markets in the United States, Europe, and Japan. Furthermore, increasing the quality and marketing of coffee within domestic markets should lead to increased local consumption and additional market opportunities for higher value coffee.

Consumer demand for various types of coffee, in combination with their level of supply, will have a significant effect on the price of different coffees. Consumers are and will continue to define the quality they are demanding. Producers, roasters, and buyers need to respond to these market trends in order to stay profitable. Since the market is demanding higher quality and premium coffee, producers and roasters need to improve quality, but they should also improve communication between themselves and consumers through various business practices such as certification, regional labeling, and branding, among others.

There are five key areas that will be supported which can make a significant contribution to improved business practices and marketing. This component will: 1) Improve market